

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 March 2005 (10.03.2005)

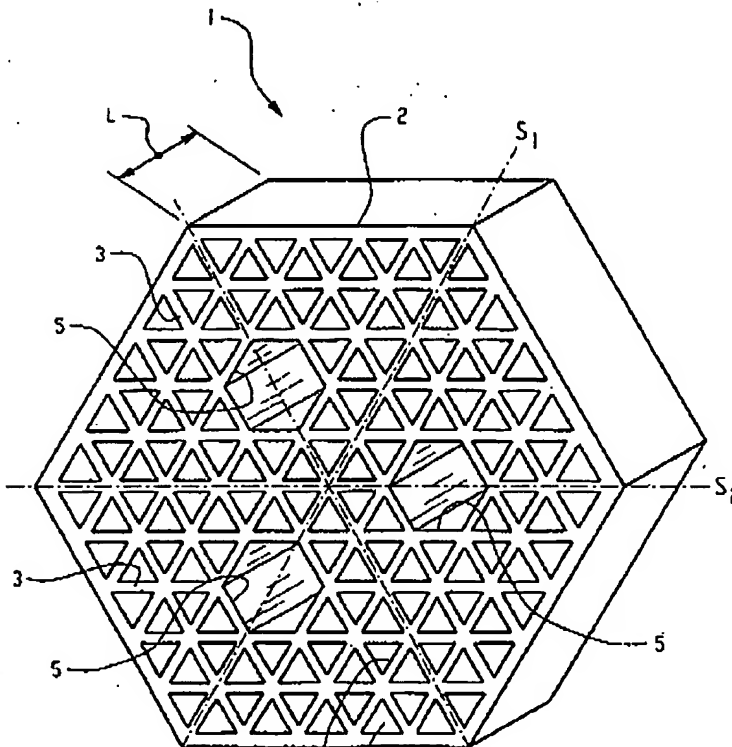
PCT

(10) International Publication Number
WO 2005/021152 A1

- (51) International Patent Classification⁷: B01J 19/30, B01D 53/50, F28D 17/02
- (21) International Application Number: PCT/US2004/027723
- (22) International Filing Date: 26 August 2004 (26.08.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/498,150 27 August 2003 (27.08.2003) US
10/744,381 23 December 2003 (23.12.2003) US
- (71) Applicant (for all designated States except US): SAINT-GOBAIN CERAMICS & PLASTICS, INC. [US/US]; 3840 Fishcreek Road, Stow, OH 44224 (US).
- (72) Inventors: NIKNAFS, Hassan, S.; 2904 Heatherwood Court, Stow, OH 44224 (US). MILLER, Robert, L.; 4024 Villas Drive, Stow, OH 44224 (US).
- (74) Agents: SKERRY, Ann, M. et al.; Fay, Sharpe, Fagan Minnich & McKee LLP, 1100 Superior Avenue, Seventh Floor, Cleveland, OH 44114-2518 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AH, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GH, GI, GM, GR, GU, HK, HN, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SH, SI, SJ, SK, SL, SM, SN, SR, ST, SV, SY, TD, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: CERAMIC PACKING ELEMENT WITH ENLARGED FLUID FLOW PASSAGES



(57) Abstract: A ceramic packing element (1) has a polygonal structure (2) with a plane of symmetry in a direction defining a length (L) of the element and a greatest dimension (D) perpendicular to the length defining a diameter of the element. The element has a plurality of internal septa (3) defining a plurality of identical first passages (4) through the element each of which has a first cross-sectional area and at plurality of second passages (5) of a larger cross-sectional area and at plurality of second passages (5) of a larger cross section area than that of one of the first passages. At least one of the second passages has a cross sectional area which is at least four times that of one of the first passages.

2005/021152 A1